Ceramic Seriation, Radiocarbon Dates, And Subsistence Data from the Kissimmee River Valley: Archaeological Evidence for Belle Glade Occupation

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Originally published in
The Florida Anthropologist
Vol. 49 no. 2 June 1996

CERAMIC SERIATION, RADIOCARBON DATES, AND SUBSISTENCE DATA FROM THE KISSIMMEE RIVER VALLEY: ARCHAEOLOGICAL EVIDENCE FOR BELLE GLADE OCCUPATION

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Archaeologists working in south Florida have long recognized a relationship between the prehistoric cultures that occupied the Kissimmee River and Lake Okeechobee basins. As early as 1941, John Goggin included the river valley in his Kissimmee-Eastern Okeechobee subarea of the larger Glades culture area (Goggin 1941:25). At the same time he observed that this portion of the Glades area was the least known archaeologically of any in the state. Over the next several decades this situation changed very little. Except for Griffin and Smith's (1948) excavation at the Goodnow Mound near Sebring, little in the way of substantive research was accomplished in the Kissimmee region. As late as 1980, Milanich and Fairbanks (1980:26) still considered the region to be "poorly known" archaeologically.

Since 1985, cultural resource management projects and problem-oriented research (e.g., Austin 1987, 1993; Austin et al. 1994; Janus Research 1995; Johnson 1991, 1994; Mitchell 1996) have added considerably to the region's archaeological data base. In this paper, I review data from several of these projects which confirm conclusively Goggin's original assertion. The bulk of these data come from recent test excavations at six prehistoric sites located on the Avon Park Air Force Range (APAFR) in Polk and Highlands Counties (Austin et al. 1994). A ceramic seriation in conjunction with radiocarbon dates from these sites document a substantial post-Archaic occupation beginning at approximately 1000 B.C. and continuing through the seventeenth century A.D. The ceramic, settlement, and subsistence data all indicate close affinities with the Belle Glade culture of the Lake Okeechobee basin. Test excavations at three other sites — the Fischer site and River Ranch Midden in Polk County, and Bluff Hammock in Highlands County — illustrate the geographic extent of Belle Glade occupation within the valley.

Environmental Setting

The Kissimmee River basin extends from Orlando south to Lake Okeechobee, encompassing over 7800 km^2 (Conover and Leach 1975; U.S. Army Corps of Engineers [USA COE] 1991:2; VanArman et al. 1984:154). The upper basin consists of the many lakes in southern Orange, western Osceola, and eastern Polk Counties that form the headwaters of the river. The lakes are connected by a series of streams and shallow sloughs, most of which were channelized by Hamilton Disston in the 1880s. The lower basin (Figure 1) begins at Lake Kissimmee. From here the Kissimmee River winds its way south to Lake Okeechobee, a distance of about 165 river km. The river flows across the low-lying Osceola and Okeechobee Plains, former marine terraces that formed during the Pleistocene (Brooks 1974:266; Healy 1975). The eastern divide between the Kissimmee and St. Johns Rivers is a slightly elevated (maximum of 23 m in elevation) upland area of pine flatwoods. To the west is the Lake Wales Ridge, an extension of the Central Highlands which separates the Kissimmee River valley from that of the Peace River. Included in the lower basin is Lake Istokpoga and its associated outflow, Indian Prairie. Another important drainage is Arbuckle Creek which flows southward from Lake Arbuckle to Lake Istokpoga.

In its natural state, the Kissimmee was originally a slow-moving, meandering river with a floodplain that varied from 1.5-3 km in width (Florida Department of Natural Resources [FDNR] 1974:89; USA COE 1991:7). Runoff from the surrounding poorly drained flatlands, and the rise of lake levels in the upper basin at the end of the summer rainy season, caused the river to overflow its banks regularly. Indeed, early accounts of the region's natural environment are nearly unanimous in commenting on the overwhelming presence of water throughout the valley (Davis 1943:34; McCaffrey et al. 1976; Parker et al. 1955:301; Will 1977:9-10). In some years the flooding was so severe that the river resembled a wide lake, and low-lying areas were often under water for several months at a time (USA COE 1991:A-6, 15). As a result, the river has experienced numerous attempts to control it (cf. McCaffrey et al. 1976; Tebeau 1974; VanArman et al. 1984:138-139). The most recent, in the 1960s, was a massive flood control project by the U.S. Army Corps of Engineers which involved channelizing the river and constructing a series of levees and water control structures along its course. While successful in controlling flood waters, the negative effect of this project on the natural ecosystem has been dramatic. Seasonally fluctuating water levels in conjunction with undulating floodplain topography, a meandering river channel, oxbows, and natural, discontinuous levees, were essential components for maintaining the river's diverse mosaic of natural wetland habitats. By eliminating seasonal inundation, channelization has caused many marshes to dry up allowing terrestrial vegetation to invade (VanArman et al. 1984:154). Of an estimated 14,000 hectares of wetlands that once existed in the floodplain, only about 5,700 remain today (USA COE 1991:26). Most of the drained land is used for cattle ranching.